

ABSTRACT

Alignment parameters determination method with less overlay error after exposure without tremendous
expending time and cost is provided. Provision is made
of a fetching unit 610 performing position measurement
for measurement points set for each of any shots through
opto-electric detection and statistical processing based
on the measured positions and design positions of said
measurement points to obtain reference computation
results, a fetching unit 640 obtaining reference
processing results obtained by positioning and exposing
the shots at a predetermined exposure apparatus based on
the reference computation results, then measuring
overlay error for said shots, a fetching unit 620
changing at least parts of the predetermined alignment
parameters and performing position measurement for
measurement points set for each shot and statistical
processing based on the measured positions and design
positions of said measurement points to obtain
comparative computation results, and a controller 650
calculating estimated overlay error when assuming
positioning and exposure of shots at a predetermined
exposure apparatus based on the comparative computation
results using the reference computation results,

comparative computation results, and reference processing results.